## **REMARKS**

The Office Action of August 30, 2006 has been carefully reviewed and the foregoing amendment has been made in response thereto, thereby defining the present invention more clearly and distinguishing it more positively from the prior art. For these reasons and those set forth in detail below, favorable reconsideration and early allowance of the claims is courteously requested.

Claims 1-10, 17-20, 24-49 are pending in the application. Claims 1-10 and 17-18 are withdrawn from consideration. Claims 19, 20 and 24-49 stand rejected. The application is amended herein to amend claims 20, 24-29, 33, 35-37, and 40-49.

Claims 19, 20 and 24-47 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Budolfson (5,192,259) in view of Chiarelli (3704891), Corely (4943055), Mason (6,059,673), Nudo (6846252) and Park et al. (6139438). With respect to claim 19, the rejection is respectfully traversed. Reconsideration and withdrawal of the rejection of claim 19 is courteously requested. With respect to amended claims 20 and 24-27, these claims include new limitations relating to the practice mat and these new limitations are not taught or suggested by any of the prior art of record. It is submitted that these new limitations overcome the rejection. Reconsideration and withdrawal of the rejection of claims 20 and 24-27 is courteously requested.

In addition to the new claim limitation presented herein and to the reasons stated below, Applicant has submitted an affidavit under 37 C.F.R. 1.131 showing secondary evidence in rebuttal of the Examiners prima facie case of obviousness. It is

hereby courteously requested that Applicants' secondary evidence, taken as a whole, be weighed against the evidence supporting the *prima facie* case.

Re: the spherical elements,

The Examiner states: a regulation hockey puck weighs between 5.5 oz to 6 oz. Applicant agrees. The Examiner alleges: a regulation hockey puck has a diameter ranging from 1" to 3". Applicant respectfully disagrees. Chiarelli teaches that a regulation hockey puck is a cylindrical element having a diameter of approximately 3.0 inches and a thickness of approximately 1.0 inch. (Figure 1 and col. 1, line 40).

The Examiner states: "Budolfson teaches that for strengthening hands and wrists of athletes, the athletes should practice and train using weighted balls (22)."

Applicant respectfully disagrees. Budolfson teaches the use of a single weighted ball for strengthening the hands and wrists. Budolfson never teaches or suggests that an athlete train with more than one ball. Budolfson never teaches or suggests that training with more than one ball is beneficial. Budolfson never teaches or suggests that the weighted ball could be used on a practice mat configured to be indented by a weighted ball to thereby increase the rolling resistance of the weighted ball as it rolls over the practice mat, as is set forth in each of Applicants claims 20 and 24-49. While Budolfson suggests that the single training ball may have a range of weights and diameters, (2.5 – 3.0 inches in diameter and 2.5 to 4.0 pounds), there is no suggestion that training with two balls with each ball having a different weight and a different diameter provides any benefit.

Moreover Budolfson is completely silent with respect to providing a training kit that is configured to force a player to use a "wrist roll," (rolling the wrist of the top hand to

apply a torque to the upper end of a hockey stick shaft), to maneuver the balls with a hockey stick. (See Applicants' substitute specification paragraph 27, 31 and 32.)

The Examiner states: Chiarelli also shows weighted pucks, wherein the weight of the puck can be 2 to 3 times greater than a regulation puck (11-12 oz to 16.5 – 18 oz) for use by senior or adult players and lighter than regulation puck (<5.5 oz to 6 oz) for younger players. Applicant agrees, however Applicant fails to comprehend how the weighted pucks taught by Chiarelli relate to the sets of different diameter and different weight balls or spherical elements set forth in the Applicants claims. Chiarelli does not teach or suggest the use of a ball of any kind. Chiarelli does not teach or suggest combining balls or pucks in a set, with each ball or puck having a different weight and a different diameter. Instead Chiarelli teaches away from using a ball or spherical element as a practice element by stating; "in order that a practice puck be beneficial it must conform to the official size of an ice-hockey puck, (1 inch thick and 3 inches in diameter), and have substantially the same resiliency as vulcanized rubber to afford the same "feel" on the stick, and must also be somewhat heavier than the standard vulcanized rubber puck" (Col. 1, lines 38-44). Moreover, Chiraelli implies that the weighted pucks are used on ice and never teaches or suggests a hockey stick handling training kit that includes, "a practice mat comprising a uniformly thick layer of a compliant material formed to be indented by a ball weighing 538.7 grams (19 ounces) or more, and wherein an indentation caused by a ball weighing 538.7 grams or more increases a rolling resistance of the ball weighing 538.7 grams or more as it rolls over the practice mat." This limitation is set forth in each of Applicants claims 20 and 24-49. Chiarelli states: "It is a practice during ice hockey practice sessions for some individuals or teams to use an

object somewhat heavier than a hockey puck in order to build up strength and rhythm enabling them to shoot and pass and control a standard size puck with greater speed and force and accuracy during actual game conditions." Applicant admits that it is old in the art for hockey players to use an object somewhat heavier than a hockey puck in order to build up strength and rhythm enabling them to shoot and pass and control a standard size puck with greater speed and force and accuracy during actual game conditions. However Applicants' claim 19 sets forth a set of steel balls each having a different weight and a different diameter. Moreover, Applicants claims 20 and 24-49 set forth a practice mat configured to be indented by a ball weighing 19 ounces or more to increase the rolling resistance of balls weighing more than 19 ounces as they roll over the practice mat. It is unclear to Applicant how Chiarellis' teaching of a weighted puck that "must conform to the official size of an ice-hockey puck" and that appears to be used on ice, teaches or suggests the set of balls and practice mat set forth in Applicants claims. It is also unclear to Applicant how Chiarellis' teachings would motivate Applicant to combine Chiarelli with any of the other references of record. Moreover it is unclear which of Applicants claim limitations is taught or suggested by Chiarelli.

The Examiner states: Corley shows that weighted warm-up balls are desirable in training athletes in sporting events, that the exercise benefits of weight training are well known, that muscles that manipulate weights strengthen, and that Corley further teaches the benefit of providing a set of training balls, wherein the set includes at least two balls and the balls can be identified with indicia specifically indicating the relative weight of each ball. Applicant agrees that weight training is beneficial.

Applicant further agrees that Corley teaches a set of training balls with each ball having a

different weight. Applicant recognizes that Corley teaches a set of weighted softballs (or baseballs) with each training ball having a different weight. However, the set of weighted balls taught by Corley each has the same diameter and specifically the same diameter as a regulation ball. Corley teaches that the set of different weighted balls is used to select an appropriate weight ball for warm up, to strengthen the muscles in a players throwing arm, and to acclimate a person to handling a ball of relatively heavy weight, thereby causing that person to instinctively exert more force on a regulation ball, that seems relatively light, causing that ball to be thrown farther and faster, (Col 2, lines 63-68). However, Corley never teaches or suggests a hockey stick training kit comprising two or more balls or spherical elements with each ball or spherical element having a different weight and a different diameter as set forth in Applicants claims. Moreover, Corley never teaches or suggests placing a weighted ball on a practice mat and stick handling the ball with a hockey stick. Corley never teaches or suggests that a set of different weight balls can be used in a manner that forces a user to use a desired wrist or arm motion.

The Examiner quotes In re Allen, 220 F.2d, 454, 456, 105 USPQ 233, 235 (CCPA 1995) [W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation." and references Peterson, 315 F.3d at 1330, 65 USPQ2d at 1382. The Examiner further quotes In re Heoschele, 406 F.2d 1403, 160 USPQ 809 (CCPA 1969) "The normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where a disclosed set of percentage ranges is the optimum combination of percentages."

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It is respectfully submitted that these citations are only relevant when the "generally conditions of a claims" or "disclosed set of percentages" are already generally known or disclosed in the prior art. As pointed out above, the prior art of record, whether taken individually or in combination, fails to teach or suggest a hockey stick handling training kit comprising two or more balls or spherical elements with each ball or spherical element having a different weight and a different diameter, as set forth in each of Applicants' claims. It is further pointed out that Applicants' claimed invention was not the result of routine experimentation but instead was arrived at quit by accident as is described in Applicant affidavit filed herewith.

The Examiner further states: based on the above teachings, (Budolfson, Chiarelli and Corly), it is readily apparent that there is nothing unobvious in providing balls of varying weight and diameter in a set or kit, a kit with varying weighted balls, provides an ideal means for a person desiring to warm up or practice, to select a ball most useful to him or her based upon his or her strength or other factors. Applicant respectfully disagrees. None of the above listed references teaches the limitation of a set of two or more training balls wherein each training ball has a different diameter. While Chiarelli teaches a weighted puck for hockey stick handling practice and suggests that different weights may be appropriate for different players, Chiarelli actually teaches away from using any practice device that is not the same size and shape as a regulation hockey puck. This is hardly motivation to combine the puck of Chiarelli with the single ball taught by Budolson, or with the set of different weighted softballs taught by Corley. While Corley teaches a set of different weight balls, the balls are for throwing and they are all the same diameter and otherwise indistinguishable from a regulation ball. This is

hardly motivation to combine the set of equal diameter throwing balls with references that teach hockey stick handling practice elements. Only Budolfson teaches a weighted ball for hockey stick handling training; but Budolfson fails to teach or suggest using two or more balls with each ball having a different weight and a different diameter. Specifically, Budolfson fails to recognize that a user can learn and reinforce the desired stick handling wrist roll motion and increase stick handling speed by progressing from a heavier, larger diameter ball, to a lighter, smaller diameter ball.

Re: the practice surface or mat:

The Examiner states: Budolson additionally shows that the spherical element can be practiced on a playing or practice surface wherein the practice surface is a flat hard planer surface, which can be one of a concrete, i.e. garage or driveway, wooden planar surface, hard asphalt etc. Applicant agrees. However, Budolfson does not teach or suggest "a practice mat comprising a uniformly thick layer of a compliant material formed to be indented by a ball weighing 538.7 grams (19 ounces) or more, and wherein an indentation caused by a ball weighing 538.7 grams or more increases a rolling resistance of the ball weighing 538.7 grams or more as it rolls over the practice mat," as set forth in each of Applicants amended claims 20, 22 and 24-49.

With respect to Mason, as pointed out in earlier arguments; Mason teaches a goalie training zone comprising surfaces and lanes made from a synthetic ice material that allows conventional ice skates to be utilized, (col. 2, line 2 plus abstract). Shooters skate down the lanes and shoot conventional hockey pucks to at a goalie in the goalie zone. However, Mason lacks any teaching or suggestion of a hockey stick handling training kit that includes balls of any kind and therefore fails to teach or suggest the

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limitations set forth in Applicants claim 19. Moreover, Mason lacks any teaching or suggestion that the synthetic ice comprises "a uniformly thick layer of a compliant material formed to be indented by a ball weighing 538.7 grams (19 ounces) or more, and wherein an indentation caused by a ball weighing 538.7 grams or more increases a rolling resistance of the ball weighing 538.7 grams or more as it rolls over the practice mat." and therefore fails to teach or suggest the limitations set forth in each of Applicants amended claims 20, 22 and 24-49.

With respect to Nudo, as pointed out in earlier arguments; Nudo teaches a hockey practice device comprising a body of synthetic plastic such as polyethylene formed with a practice surface that may be shaved or unshaved to provide more friction, (Col 2, lines 22-26). Nudo teaches that a player uses a standard hockey stick and a standard hockey puck or field hockey puck designed for use on synthetic ice, and strikes the puck into a netted frame, (Col. 2, lines 18-22). Nudo teaches a practice device configured to store a plurality of practice pucks. However, Nudo lacks any teaching or suggestion of a hockey stick handling training kit that includes balls of any kind and therefore fails to teach or suggest the limitations set forth in Applicants claim 19. Moreover, Nudo lacks any teaching or suggestion that the synthetic plastic such as polyethylene comprises "a uniformly thick layer of a compliant material formed to be indented by a ball weighing 538.7 grams (19 ounces) or more, and wherein an indentation caused by a ball weighing 538.7 grams or more increases a rolling resistance of the ball weighing 538.7 grams or more as it rolls over the practice mat." and therefore fails to teach or suggest the limitations set forth in each of Applicants amended claims 20, 22 and 24-49.

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With respect to Park et al., as pointed out in earlier arguments, Park et al. teaches an artificial ice-skating rink assembly comprising a plurality of interlocking panels, (abstract). The panels include a practice surface that can be skated on with ice skates and simulates the gliding properties of natural ice, (Col. 12, lines 14-20).

However, Park et al. lacks any teaching or suggestion of a hockey stick handling training kit that includes balls of any kind and therefore fails to teach or suggest the limitations set forth in Applicants claim 19. Moreover, Park et al. lacks any teaching or suggestion that the practice surface that can be skated on with ice skates and simulates the gliding properties of natural ice comprises "a uniformly thick layer of a compliant material formed to be indented by a ball weighing 538.7 grams (19 ounces) or more, and wherein an indentation caused by a ball weighing 538.7 grams or more increases a rolling resistance of the ball weighing 538.7 grams or more as it rolls over the practice mat." and therefore fails to teach or suggest the limitations set forth in each of Applicants amended claims 20, 22 and 24-49.

The material properties of Applicants' claimed practice mat is fundamentally different from the material properties of any of the practice surfaces described in the prior art of record. Specifically each of the prior art reference describe a practice surface configured to reduce friction so that a hockey puck, or a skate, will readily slide over the surface. Conversely, Applicants practice mat is configured with increased friction to cause a ball to roll over the surface instead of slide. In addition, Applicants' practice mat is compliant enough to be indented by a 19 ounce ball and the indentation increases roll resistance as the bal rolls over the surface.

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Applicants claim 19 and amended claims 20 and 24-27 set forth a hockey handling stick training kit comprising:

four solid steel balls with each ball having a different weight ranging from 226.8 to 1814.4 grams, (8 to 64 ounces) and with each ball having a different diameter ranging from 38.1 to 76.2 mm, (1.5 to 3.0 inches) and wherein at a first of the four steel balls has a diameter of 50.8 mm (2.0 inches) or less and a weight of 538.65 grams, (19 ounces) or less, and further wherein a second of the four steel balls has a diameter of 63.5 mm, (2.5 inches) or more and a weight of 1077.3 grams (38 ounces) or more.

Applicants amended claims 28-36 and 48 set forth a hockey stick handling training kit comprising:

a practice mat comprising a compliant material formed to be indented by a ball weighing 538.7 grams (19 ounces) or more, and wherein an indentation caused by a ball weighing 538.7 grams or more increases a rolling resistance of the ball weighing 538.7 grams or more as it rolls over the practice mat.

Amended claims 37-47 and 49 set forth a hockey stick handling training kit comprising:

a practice mat comprising a compliant material formed to be indented by a

spherical element weighing 538.7 grams (19 ounces) or more, and wherein an

indentation caused by the spherical element weighing 538.7 grams or more

increases a rolling resistance of the spherical element weighing 538.7 grams or

more as it rolls over the practice mat and further wherein the practice mat includes
a practice surface for contacting the spherical elements during stick handling

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practice and wherein the practice surface is formed with a coefficient of friction between the practice surface and the spherical elements ranging from 0.5 to 0.9

above, the prior art of record does not establish a *prima facie* case of obviousness for the following reasons. 1. There is no suggestion or motivation in the references of record or in the knowledge generally available to one of ordinary skill in the art to modify the references of record or to combine the reference teachings in a way that would lead to Applicants claimed invention. 2. There is no reasonable expectation that combining the reference teachings of record would provide a hockey stick handling training kit for successfully training a hockey player to execute proper stick handling motions. 3. The prior art references of record, whether taken alone or in combination, do not teach all of the limitations set forth in the pending claims. Support for Applicants' position is stated below.

Further to the arguments present above, Applicant has submitted an Affidavit under 37 C.F.R. 1.131 providing objective secondary evidence in rebuttal to the Examiners *prima facie* case of obviousness.

The affidavit presents evidence of commercial success of the claimed invention. Specifically Applicant started a company to commercialize the invention beginning in October 2003 and has sold 1051 hockey stick handling training kits, see paragraphs 2, 3 and 15.

The affidavit presents evidence that the claimed invention satisfied a long felt need in the industry and that others have failed to find a solution to the problem.

Specifically prior to Applicants' invention Applicant could not find a suitable stick

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handling training product for teaching the wrist roll in the market, see paragraph 8. Moreover, in an endorsement submitted to Applicant, hockey training expert Dr. Clint Steele states, "Up until now I have not found a "good" off-ice training program designed to teach good hands...until now. The KwiK-Hands<sup>TM</sup> Stick handling System is unbelievable when it comes to teaching proper stick handling technique. Many can tell you how to stickhandle and even show you how to stickhandle but I have NEVER seen a program that actually teaches you." (paragraph 12).

The affidavit presents evidence that the claimed invention provides unexpected results. Specifically Applicant states in paragraph 9, "Upon testing the different diameter and different weight balls I made an unexpected discovery. Specifically I discovered quit accidentally that by stick handling each ball starting with the heaviest largest diameter ball first and progressing to the lightest, smallest diameter ball last I was able to reinforce the wrist roll motion with the heavier balls and then increase speed and strength, while still using the wrist roll, as I progressed to the lightest ball."

In summary, it is respectfully submitted that the combined teachings of Budolfson, Chiarelli, Corley Mason, Nudo and Park et al. do not teach or suggest all of the limitations set forth in the pending claims. In addition, Applicant has submitted an affidavit setting forth secondary evidence showing commercial success, long felt need, failure by others to solve the problem, and unexpected results, all of which are submitted in rebuttal to the Examiner's finding of *prima facie* obviousness. Accordingly, it is respectfully submitted that in view of the foregoing amendments and the secondary evidence submitted herewith, the present application is in condition for allowance.

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Accordingly favorable reconsideration and withdrawal of the rejections is hereby earnestly requested.

If the Examiner feels that any further discussion of the invention would be helpful, perhaps in the form of an Examiner's Amendment, applicant's representative is available at 781 938-9169 and earnestly solicits such discussion.

Respectively submitted,

**Applicants** 

Hwrrel Heller By: Edward L. Kelley

Agent for Applicant Reg. No. 41,112

Invention Management Associates

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